To: EMS Constituents

Over the past 2 years, EMS Authority has worked with a stakeholder group to develop a new EMS data set for use in calculating quality of care indicators and general statistics. Representatives from EMS Providers (public and private) and Local EMS Agencies (LEMSAs) participated in this effort. In addition, every effort is being made to align the codes used for specific elements to those used in the National Fire Incident Reporting System. The EMS Authority is working at the federal level with the team charged with the development of the National EMS Information System data set.

The data set reflects an "optimal data set" that will be used in the development of the California EMS Information System (CEMSIS). CEMSIS will provide a statewide EMS database. The EMS Authority will match local files against hospital emergency and discharge data as well as against vital statistics death files. Additional data resulting from these matches will be added to the appropriate EMS record. All personal identifying information will then be cleansed from the files. This aggregate data will then be made available for access by EMS agencies through a web-based program. In this way, local agencies will have statewide data available for comparative analysis and general statistical purposes.

This data set includes several new elements not currently included in either the State data set (EMSA #161) or the federal NHTSA dataset. The Group members believe these elements are necessary to calculate valuable quality indicators.

Once the CEMSIS is operational (November 2002) and LEMSAs begin submitting files, each data element will be evaluated for its reliability and usefulness in quality improvement efforts. This information will be used to establish a new EMS data set for EMS providers and agencies in California.

Please feel free to review the attached data dictionary. Comments regarding the data dictionary are **DUE BY JUNE 7, 2002** and should be directed to Bonnie Sinz at bsinz@emsa.ca.gov or mailed to:

<div align="center">

Bonnie Sinz
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1930 9th Street
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</div>

California Emergency Medical Services Information System (CEMSIS)

Draft Data Set

February 22, 2002

INTRODUCTION

Background

This Proposed Statewide EMS Data Element Dictionary was developed by the Ad Hoc Group of the Vision Data Group as part of the multi-year Vision Project to improve California's Emergency Medical Services (EMS).

It is a *preliminary draft version* that is expected to undergo many iterative reviews and revisions as California's many EMS stakeholders participate in its development and testing. A detailed data dictionary will be developed.

The National Highway Traffic Safety Administration (NHTSA) Uniform EMS Data Element Dictionary provided the starting point for the data elements and code sets contained in this dictionary. The NHTSA data element number is provided for each data element that is the same or similar to one recommended by NHTSA.

HIPAA

The California EMS Information System, which will include the Statewide EMS Database, will comply with the requirements of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), especially with regard to the **security** and **privacy** of any information that is *created or received by a health care provider and is related to the past, present, or future physical or mental health or condition of an individual or the provision of health care to an individual*. All data obtained from LEMSAs and others via Electronic Data Interchange (EDI), stored and maintained by the EMSA in the CEMSIS, and released to others in electronic or other form will comply with HIPAA.

Glossary

The following abbreviations and acronyms are used in this dictionary.

AVL – Automatic Vehicle Locator (typically uses GPS for position and universal time)

CAD – Computer Aided Dispatch

CEMSIS – California EMS Information System

ED – Emergency Department of a hospital or other acute care facility

EDI – Electronic Data Interchange

EMS – Emergency Medical Services

EMSA – Emergency Medical Services Authority

GPS – Global Positioning System

NHTSA – National Highway Traffic Safety Administration

LEMSA – Local Emergency Medical Services Agency

PCR – Patient Care Record

PSAP – Public Safety Answering Point (can be primary or secondary)

The Utstein Style – internationally accepted guidelines for reporting cardiac arrest data.

Data Structure

The Statewide EMS Database will be structured to accommodate the primary datasets that are created/collected during the various activities of the basic EMS business process *(Respond to Medical Emergency)*. That is, data that is created/collected for the 9-1-1 EMS call by the primary PSAP will become **Incident Data** in the Statewide EMS Database.

Data that is created/collected during the dispatch of EMS response units will become **Dispatch Data** in the Statewide EMS Database.

Likewise, data that is created/collected by the EMS response crew as part of the Patient Care Record will become **PCR Data** in the Statewide EMS Database.

 (Note: While the above datasets are usually created by those indicated, sometimes they are initiated by others, and often they are updated by subsequent participants in the EMS business process.)

Finally, diagnosis and treatment data that is created/collected by the hospital Emergency Department will become **ED data** in the Statewide EMS Database. *(Note: ED data will not be part of the Statewide EMS Database initially.)*

Within the PCR Data set (i.e., for each PCR Identifier), there is one set of **Patient Demographic Data**, one set of **Assessment Data**, one set of **Treatment Data**, and one set of **Transport Data**.

The Statewide EMS Database uses multi-valued data elements to accommodate instances where there are multiple values for a data element within a data set. For example, Crew Member Number is multi-valued within the Dispatch Data because normally multiple crew members per unit respond to an EMS incident. Crew Member Type also is multi-valued; but, in addition, it is associated on a one-to-one basis with each Crew Member Number (i.e., for each member of the EMS response crew, there is a Crew Member Number and a Crew Member Type).

Format

Each proposed statewide EMS data element is presented using the following template.

EMSA #   NHTSA #

Data Element Name:	Name
Data Element Group:	Group or 'database sub-set' to which the data element belongs
Definition:	Short definition of the data element
Type & Maximum Size:	For example, numeric (n.m) [where n = the number of digits, and m = the number of decimal places within n], short text (n), alphanumeric (n), etc. Note: maximum size is yet to be determined depending on the values given the code set.
Code Set:	Allowable values for coded data elements **Note:** Some code sets are self-explanatory (e.g. Glasgow Coma Scale) while others will need a detailed definition (e.g. Primary Impression). Once the data elements and associated code sets go through a thorough constituent group review and comment period, the Data Ad Hoc Group will make the necessary revisions and a detailed data dictionary will be created.

Content:	Detailed discussion of definition and content.
Discussion:	Provide further details and justify the data element.
Technical Comments:	Additional information will be added at a later date that may be of use to individuals setting up a data collection system.

The EMSA# at the left end of the line above each data element table uniquely identifies each proposed California statewide EMS data element. NHTSA's data element number from its Uniform EMS Data Element Dictionary is shown at the right end of the line above each data element table for each data element that is the same as or similar to a NHTSA element.

Review Schedule:

December 14, 2001	To Vision D Committee
January 28, 2002	Deadline for Vision D Committee comments to EMSA
February 4, 2002	To Data Ad Hoc Group for revision
February 22, 2002	To Vision D Committee for distribution to constituent groups for review and comment
to be determined at Vision D meeting	Deadline for constituent group comments to EMSA

EMSA #1   no NHTSA #

Data Element Name:	**LEMSA Identifier**
Data Element Group:	Incident Data
Definition:	The unique identifier for the LEMSA that is responsible for the EMS incident.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within California for the Local Emergency Medical Services Agency (LEMSA).   In single-county LEMSAs, it should be the standard alphanumeric California County Code. Multi-county LEMSAs will be assigned a code.

Discussion: The LEMSA Identifier will be used with the PSAP Identifier and the Incident Identifier to uniquely identify the EMS incident within California.

This identifier will be used to link information for a particular LEMSA to create a LEMSA profile and may be used for linking EMS data with other data related to the incident (e.g., emergency department and inpatient hospital files).

Although this identifier may not be contained in each LEMSA database, it is needed to ensure uniqueness in the CEMSIS.

EMSA #2   no NHTSA #

Data Element Name:	**PSAP Identifier**
Data Element Group:	Incident Data
Definition:	The unique identifier for the primary Public Safety Answering Point that answered the 9-1-1 (or other) call for the EMS incident.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier should be the unique 4-character PSAP ID used by NENA (the National Emergency Number Association), if available in the LEMSA data.

If the LEMSA database does not contain the NENA PSAP ID, another identifier or mechanism must be used to ensure that the Incident Identifier uniquely identifies the EMS incident within the LEMSA.

Discussion: The PSAP Identifier will be used with the LEMSA Identifier and the Incident Identifier to uniquely identify the EMS incident over time.

EMSA #3   NHTSA #21

Data Element Name:	**Incident Identifier**
Data Element Group:	Incident Data
Definition:	The unique identifier for each EMS incident.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier, when combined with the PSAP Identifier, must be unique within the Local Emergency Medical Services Agency (LEMSA) for an EMS incident over time (i.e., it must provide uniqueness in the CEMSIS database, which will contain EMS data for multiple years). For example, if a PSAP re-uses Incident Identifiers each year, the LEMSA could use the last two digits of the year the incident occurred as a prefix to the PSAP-assigned Incident Identifier.

Discussion: The Incident Identifier will be used with the PSAP Identifier and the LEMSA Identifier to uniquely identify the EMS incident within California. This identifier may be valuable for linking EMS data with other data related to the incident (e.g., emergency department and inpatient hospital files) and is necessary to keep data regarding a specific incident separate from others.

Ideally, this identifier will be assigned by the primary PSAP as part of the 9-1-1 call record, and passed electronically to each successive participant in the process of responding to the medical emergency (including possibly a secondary PSAP, the Emergency Medical Dispatcher, one or more Response Unit(s), the Base Hospital, the receiving Emergency Department/facility, and the admitting hospital).

EMSA #4   NHTSA #1

Data Element Name:	**Incident Address**
Data Element Group:	Incident Data
Definition:	Address (or best approximation) where patient was found. If no patient was found, the address to which the EMS unit responded.
Type & Maximum Size:	Text 2 lines with second line used for intersection, freeway mile marker, freeway exits, etc.
Code Set:	None

Content: Contains the street address or Rural Delivery number, followed by the apartment number or internal building number of the EMS incident.

Discussion: Initially, this will be the address or location identifier to which the EMS unit is dispatched. Subsequently, it may be updated if the patient was found at a different location.

Route numbers and mileposts, or other landmarks may be used if a street address is not applicable.

EMSA #5   NHTSA #2

Data Element Name:	**Incident City**
Data Element Group:	Incident Data
Definition:	City or community where patient was found. If no patient was found, the city or community to which the EMS unit responded (or best approximation).
Type & Maximum Size:	Alphanumeric
Code Set:	NNNNN {character code} UNKWN Unknown

Content: This field uses the local city codes of each LEMSA.

Discussion: The city location of the incident may facilitate probabilistic linkage to vital statistics, crash reports and hospital data.

EMSA #6   NHTSA #3

Data Element Name:	**Incident County**
Data Element Group:	Incident Data
Definition:	County where patient was found. If no patient was found, the county to which unit responded (or best approximation).
Type & Maximum Size:	Alphanumeric
Code Set:	1 Alameda 30 Orange 2 Alpine 31 Placer 3 Amador 32 Plumas 4 Butte 33 Riverside 5 Calaveras 34 Sacramento 6 Colusa 35 San Benito 7 Contra Costa 36 San Bernardino 8 Del Norte 37 San Diego 9 El Dorado 38 San Francisco 10 Fresno 39 San Joaquin 11 Glenn 40 San Luis Obispo 12 Humboldt 41 San Mateo 13 Imperial 42 Santa Barbara 14 Inyo 43 Santa Clara 15 Kern 44 Santa Cruz 16 Kings 45 Shasta 17 Lake 46 Sierra 18 Lassen 47 Siskiyou 19 Los Angeles 48 Solano 20 Madera 49 Sonoma 21 Marin 50 Stanislaus 22 Mariposa 51 Sutter 23 Mendocino 52 Tehama 24 Merced 53 Trinity 25 Modoc 54 Tulare 26 Mono 55 Tuolumne 27 Monterey 56 Ventura 28 Napa 57 Yolo 29 Nevada 58 Yuba 98 Other

Content: This field uses the standard California County Codes (listed above).

Discussion: The county location of the incident may facilitate probabilistic linkage to vital statistics, crash reports or hospital data for the same county. The field can be used to link with federal census data aggregated by the California Department of Finance to

determine effects of population density, socioeconomic information, etc. on the need for EMS and evaluations of EMS outcome. If the incident is not within California, use code 98 (other).

EMSA #7   NHTSA #4

Data Element Name:	**Incident State**
Data Element Group:	Incident Data
Definition:	State where patient was picked up. If no patient was found, the state to which unit responded.
Type & Maximum Size:	Alphanumeric
Code Set:	AZ Arizona CA California OR Oregon NV Nevada 77 Mexico 99 Unknown

Content: This field will be coded using the above FIPS (Federal Information Processing Standards) alphabetic codes. Normally, this code will be 'CA'. However, for inter-facility transfers from out-of-state facilities, and for those EMS incidents where an EMS response occurs in nearby, but out-of-state locations, one of the other codes would apply. Interfacility transfers by air (helicopter or fixed wing) that arrive from out-of-state and EMS responds to landing area to continue the transport to a facility should code the state where the patient was picked up by CA EMS personnel.

Discussion: The state location of the EMS incident may facilitate probabilistic linkage to other data.

EMSA #8   NHTSA #5

Data Element Name:	**Location Type**	
Data Element Group:	Incident Data	
Definition:	The type of location where the incident occurred. The ICD-9-CM E849 'Place of Occurrence' code decimal value is used to classify various location types.	
Type & Maximum Size:	Alphanumeric	
Code Set:	Home/Residence Farm Mine or Quarry Industrial Place and Premises Place for Recreation or Sport	Street or Highway Public Building Residential Institution Other Specified Location Unspecified Location

Content: The ten E849 Place Of Occurrence codes are used to 'type' or classify the location where the incident occurred, not necessarily the origin of the transport.

Discussion: While the E849 codes in the ICD-9-CM strictly are for categorizing the "place where the accident or poisoning occurred," the Location Type field is used to categorize all EMS incidents. The following definitions are from ICD-9-CM.

Home / Residence (E Code 849.0)

Includes: apartment, boarding house, farm house, home premises, residential house, non-institutional place of residence, private driveway, private garage, private garden, private home, private walkway, swimming pool within private house or garden, and yard of home.

Excludes: unoccupied home under construction (E849.3), and institutional place of residence (E849.7).

Farm (E Code 849.1)

Includes: farm buildings and land under cultivation.

Excludes: farm house and home premises of farm (E849.0).

Mine or quarry (E Code 849.2)

Includes: gravel pit, sand pit, and tunnel under construction.

Industrial place and premises (E Code 849.3)

Includes: building under construction, dockyard, dry dock, factory building and premises, garage (place of work), industrial yard, loading platform in factory or store, industrial plant, railway yard, shop (place of work), warehouse, and workhouse.

Place for recreation or sport (E Code 849.4)

Includes: amusement park, baseball field, basketball court, beach resort, cricket ground, fives court, football field, golf course, gymnasium, hockey field, holiday camp, ice palace, lake resort, mountain resort, playground (including school playground), public park, public swimming pool, racecourse, resort not otherwise specified (NOS), riding school, rifle range, seashore resort, skating rink, sports ground, sports palace, stadium, tennis court, vacation resort.

Excludes: occurrences in private home, garden, swimming pool, or yard (E849.0).

Street or highway (E Code 849.5)

Includes: all public roadways.

Public building (E Code 849.6)

Any building (including adjacent grounds) used by the general public or by a particular group of the public.

Includes: airport, bank, broadcasting station, bus or railway station, cafe, casino, church, cinema, clubhouse, commercial shop, courthouse, dance hall, hotel, market, movie theater, music hall, nightclub, office, office building, opera house, parking garage, post office, public hall, restaurant, school (state, public, or private), and store.

Excludes: home garage (E849.0), and industrial building or workplace (E849.3).

Residential institution (E Code 849.7)

Includes: Children's home, dormitory, hospital, jail, home for elderly, orphanage, prison, reform school.

Other specified location (E Code 849.8)

Includes: beach NOS, canal, caravan site NOS, derelict house, desert, dock, forest, harbor, hill, lake NOS, mountain NOS, natural pond or pool, parking place or lot NOS, prairie, public place NOS, railway line, reservoir, river, sea, seashore NOS, stream, swamp, trailer court, and woods.

Excludes: resorts (E849.4).

Unspecified location (E Code 849.9)

Includes: any location not included above.

EMSA #9   no NHTSA #

Data Element Name:	**Transferring Facility Identifier**
Data Element Group:	Incident Data
Definition:	The identifier for the hospital or other facility from which an EMS patient was transferred.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within California, and should be the HIPAA National Provider Identifier.

Discussion:

EMSA #10   NHTSA #8

Data Element Name:	**Date Incident Reported**
Data Element Group:	Incident Data
Definition:	Date the EMS call was first received by a Public Safety Answering Point (PSAP) or an EMS response agency (7-digit calls).
Type & Maximum Size:	Date; YYYYMMDD
Code Set:	None

Content: Day, month and year that the incident was first reported to (i.e., call was received by) the primary PSAP.

Discussion: Ideally this will be recorded automatically by a CAD system at the primary PSAP. It should be obtained electronically from the PSAP, if possible. If not, the date reported on the Patient Care Record is acceptable.

It is a key data element for probabilistic linking with other files.

EMSA #11   NHTSA #9

Data Element Name:	**Time Incident Reported**
Data Element Group:	Incident Data
Definition:	The time the EMS call was first received by the Public Safety Answering Point (PSAP) or the EMS response agency (for 7-digit calls).
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the incident was first reported (i.e., call is received by) the primary PSAP. Midnight is '000000' and begins the day.

Discussion: Ideally, the Time Incident Reported will be recorded automatically in Pacific Standard or Daylight Time by a Computer-Aided Dispatch (CAD) system at the primary PSAP using 'universal time' from a GPS receiver, transmitted electronically to the secondary PSAP, and from there transmitted electronically to the EMS responder(s) for the Patient Care Report (PCR).

If possible, it should be obtained electronically from the PSAP to avoid manual entry effort and the attendant errors.

Time Incident Reported is generally recognized as the starting point of the EMS response, and is used to calculate key quality indicators. It is necessary to calculate the *Utstein Dispatch Center Clock.*

EMSA #12   NHTSA #22

Data Element Name:	**Response Identifier (Incident #)**
Data Element Group:	Dispatch Data
Definition:	The unique identifier for a response by an EMS response unit to an EMS incident.
Type:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within the LEMSA for each EMS response unit that responds to a given EMS incident. In order to ensure uniqueness, the LEMSA may need to append a unique response agency code (e.g., AMR, BHF, SF, etc.) to the beginning of the EMS Provider's Run Number, Response Number, etc. In those cases where an EMS response agency uses one Run Number per incident, uniqueness at the unit level can be achieved by appending the unit number to the Run Number to create the Response Identifier.

Discussion: The Response Identifier(s) will be used with the Incident Identifier, Patient Number, and the PCR Identifier(s) to identify the full record of care provided to a patient(s) for a particular EMS incident.

Ideally, the Response Identifier will be assigned automatically by Computer Aided Dispatch (CAD) as part of the dispatch record and passed electronically to each successive participant in the process of responding to the medical emergency (including possibly the Response Unit, the Base Hospital, the receiving Emergency Department/facility, and the admitting hospital).

The Response Identifier will be valuable for linking multiple EMS data records (patients) to a particular incident.

EMSA #13   NHTSA #24

Data Element Name:	**Response Unit Number**
Data Element Group:	Dispatch Data
Definition:	The number or code that uniquely identifies the response unit within an EMS response agency.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must uniquely identify a response unit within an EMS response agency.

Discussion: The Response Unit Number can be used with the Response Agency identifier to uniquely identify a response unit within the State.

EMSA #14   NHTSA #24

Data Element Name:	**Response Agency**
Data Element Group:	Dispatch Data
Definition:	The number or code that uniquely identifies the EMS response agency that provided the unit that responded to the EMS incident.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within California, and should be the HIPAA NPI (National Provider Identifier), FDID or other standard number indicator.

Discussion: This code must uniquely identify the EMS response agency (i.e., EMS provider organization) that provided one or more units in response to an EMS incident.

EMSA #15   NHTSA #10

Data Element Name:	**Time Dispatch Notified**
Data Element Group:	Dispatch Data
Definition:	The time the EMS Dispatcher was notified of the EMS call.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the incident was first reported to the EMS Response Agency dispatcher. Midnight is '000000' and begins the day.

Discussion: Ideally, this will be recorded automatically in Pacific Standard or Daylight Time by a CAD or AVL system using 'universal time' from a GPS receiver. It should be obtained electronically, if possible, from the primary or secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

The Time Dispatch Notified provides the start point of the dispatch component of the EMS response, and is necessary for assessment of delays between the time of incident report and that of EMS dispatcher notification.

EMSA # 16   NHTSA

Data Element Name:	**Date Dispatch Notified**
Data Element Group:	Dispatch Data
Definition:	The date the EMS Dispatcher was notified of the EMS call.
Type & Maximum Size:	Date; YYYYMMDD
Code Set:	None

Content: The day, month and year that the incident was first reported to the EMS Response Agency dispatcher.

Discussion: Ideally, this will be recorded automatically by a CAD system. It should be obtained electronically, if possible, from the primary or secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

The Date Dispatch Notified provides the start point of the dispatch component of the EMS response, and is necessary for assessment of delays between the date/time of incident report and that of EMS dispatcher notification.

EMSA #17   NHTSA #12

Data Element Name:	**Time Unit Notified**
Data Element Group:	Dispatch Data
Definition:	Time the EMS response unit was notified of the EMS call.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the incident was first reported to the EMS response unit. Midnight is '000000' and begins the day.

Discussion: Ideally, this will be recorded automatically in Pacific Standard or Daylight Time by a CAD or AVL system using 'universal time' from a GPS receiver. It should be obtained electronically, if possible, from the secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

The Time Unit Notified is necessary for measurement of the actual responder response. It can be useful in the planning of communication resources for individual responders, and is necessary for identification of system delays that occur after the response unit is dispatched.

EMSA # 18   NHTSA #

Data Element Name:	**Date Unit Notified**
Data Element Group:	Dispatch Data
Definition:	Date the EMS response unit was notified of the EMS call.
Type & Maximum Size:	Date; YYYYMMDD
Code Set:	None

Content: The day, month and year that the incident was first reported to the EMS response unit.

Discussion: Ideally, this will be recorded automatically in a CAD system. It should be obtained electronically, if possible, from the secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

The Date Unit Notified is necessary for measurement of the actual responder response. It can be useful in the planning of communication resources for individual responders, and is necessary for identification of system delays that occur after the response unit is dispatched.

EMSA #19   NHTSA #13

Data Element Name:	**Time Response Unit was Mobile**
Data Element Group:	Dispatch Data
Definition:	This time is the moment the EMS response vehicle began to move (i.e., 'wheels rolling').
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the EMS response unit began to move to the incident scene. Midnight is '000000' and begins the day.

Discussion: Ideally, this will be recorded automatically in Pacific Standard or Daylight Time by a CAD or AVL system using 'universal time' from a GPS receiver. It should be obtained electronically, if possible, from the secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

EMSA # 20   NHTSA #

Data Element Name:	**Date Response Unit was Mobile**
Data Element Group:	Dispatch Data
Definition:	This date is the moment the EMS response vehicle began to move (i.e., 'wheels rolling').
Type & Maximum Size:	Date; YYYYMMDD
Code Set:	None

Content: The day, month and year that the EMS response unit began to move to the incident scene.

Discussion: Ideally, this will be recorded by a CAD system. It should be obtained electronically, if possible, from the secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

EMSA #21   NHTSA #19

Data Element Name:	**Lights/Sirens to Scene**
Data Element Group:	Dispatch Data
Definition:	Identifies the use of lights and/or sirens in route to scene.
Type & Maximum Size:	Alphanumeric
Code Set:	No lights and sirens Lights and sirens Upgrade (from Code 2 to Code 3) Downgrade (from Code 3 to Code 2)

Content: The code that identifies the use of lights and/or sirens in route to the incident scene.

Discussion: This field provides the data to determine the frequency with which EMS vehicles are using lights and/or sirens during response to the EMS incident scene.

EMSA #22   NHTSA #14

Data Element Name:	**Time Vehicle Stopped at Scene**
Data Element Group:	Dispatch Data
Definition:	This time is the moment the EMS response vehicle stopped moving at the scene, at a location as close as possible to the patient.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the EMS response unit stopped moving (i.e., 'wheels stopped rolling' at the last place at the scene before patient assessment began). Midnight is '000000' and begins the day.

Discussion: Ideally, this will be recorded automatically in Pacific Standard or Daylight Time by a CAD or AVL system using 'universal time' from a GPS receiver. It should be obtained electronically, if possible, from the secondary PSAP to avoid the effort and errors that can result from manual entry on the Patient Care Report.

This data element refers to the physical motion of the responding EMS vehicle. If an individual EMT arrives at the scene by private vehicle, that is NOT the time to be entered in this field. Otherwise, system delays in having an equipped vehicle at the scene will not be identified.

EMSA #23   NHTSA #

Data Element Name:	**GPS Scene Position**
Data Element Group:	Dispatch Data
Definition:	The latitude, longitude, and altitude of the EMS incident scene as reported using the Global Positioning System.
Type & Maximum Size:	Numeric
Code Set:	None

Content: Latitude is recorded as positive north decimal degrees (e.g., +37.3943825 degrees). Longitude is recorded as positive east decimal degrees (e.g., -122.0384625 degrees). Altitude is measured in meters above mean sea level in WGS-84 (e.g., 385.69 meters).

Discussion: This GPS position identifies the latitude, longitude, and altitude at the EMS incident scene at which the EMS response unit stops and the EMS response personnel disembark. If the patient is not in the immediate vicinity of this GPS position, the GPS Patient Position data element should be used to record the actual patient position coordinates.

If latitude and/or longitude are needed in degrees, minutes, and seconds, they can be calculated from decimal degrees as follows:

- The integer portion is the degrees;
- Multiply the decimal fraction of degrees by 60 to get the decimal minutes;
- The integer portion is the minutes;
- Multiply the decimal fraction of minutes by 60 to get the seconds.

EMSA #24   NHTSA #20

Data Element Name:	**Service Type**
Data Element Group:	Dispatch Data
Definition:	Type of Emergency Medical Service provided.
Type & Maximum Size:	Alphanumeric
Code Set:	Scene response Inter-Facility Transfer (IFT)

Content: A single character code for the type of EMS provided.

Discussion: This code identifies the type of service provided, as follows:

Scene Response

Refers to direct response to incident scene, such as roadway, etc including "still alarm". The location is the location indicated in EMSA data elements #2 – #7 in this document. This code would also be used for a 9-1-1 call to any licensed or non-licensed facility for a STAT transfer.

Inter-Facility Transfer (IFT)

Refers to transfers of patients utilizing an EMS vehicle and EMS personnel from one licensed facility to another licensed facility, whether scheduled or not. This code is not used for the unit that receives the transfer of a patient from another EMS responder prior to arrival at a medical facility or final destination – that Service Type is a Rendezvous (5).

EMSA #25   NHTSA #26

Data Element Name:	**Treating Crew Member Identifier**
Data Element Group:	Dispatch Data
Definition:	At Provider and LEMSA discretion, this number identifies the different members of a crew (e.g., #1, #2, #3, etc.), or it may be the Paramedic license number or EMT certification number that uniquely identifies the crew member within California.
Structure:	Normally, multiple values per Response Identifier (#13), one for each member of the response crew.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This data element is needed to provide a link between the crew member, the crew member type, and procedures and medication administered. This element is connected to data element #26 and #27.

Discussion: The paramedic license number and EMT certification numbers that uniquely identify the EMS personnel who provided patient care in an EMS response will be used only at the Provider and LEMSA level unless the individual Provider approves inclusion at the state level. Before data is sent to EMSA for the statewide CEMSIS database, LEMSAs will convert paramedic license number and EMT certification numbers to numbers that uniquely identify each member of an EMS crew (e.g., #1, #2, #3, etc.) without losing the correct Crew Member Type for each.

EMSA #26   NHTSA #29

Data Element Name:	**Treating Crew Member Type**	
Data Element Group:	Dispatch Data	
Definition:	The professional status/level of a crew member.	
Structure:	One value per Crew Member Identifier	
Type & Maximum Size:	Alphanumeric	
Code Set:	Public Safety	Nurse
	EMT Basic	Physician
	EMT Intermediate	Other health care professional
	EMT - Paramedic	Not applicable
	Paramedic Intern	Unknown

Content: This data element will be used at the state level in computing general statistics (e.g., the percentage of responses involving each level). This element is connected with data element #25 and #27.

Discussion: This data element is used to determine the level of care that was available on the EMS responder team. This data element and the Vehicle Type will identify the type of EMS capability that was available.

EMSA #27   NHTSA #25

Data Element Name:	**Vehicle Type**		
Data Element Group:	Dispatch Data		
Definition:	Type of EMS vehicle that responded to the EMS incident.		
Type & Maximum Size:	Alphanumeric		
Code Set:	Response Classification:	Non-Transport Transporter	
	Medical Classification:	Advanced Life Support (ALS) Basic Life Support (BLS) Public Safety (PS)	
	Vehicle Classification:	Ground Air Water	

Content: Vehicle Type contains character sub-fields that describe the vehicle: response classification, medical classification, and vehicle classification to which the crew member providing treatment is attached. These sub-fields must be coded using the above codes to identify the type of EMS vehicle used by the EMS crew to travel to the incident scene. All three sub-fields must be used to fully describe the vehicle type. This element will be connected with data element #25 and #26.

Discussion: This character code identifies the type of vehicle that the crew member providing patient care was assigned to.

EMSA #28   NHTSA #32

Data Element Name:	**Patient Probable Name**
Data Element Group:	Patient Demographic Data
Definition:	The patient's legal name (as indicated on driver's license, birth certificate, etc.)
Type & Maximum Size:	Text
Code Set:	Free text entry, "none", or "unknown".

Content: "None" is used when there is no patient, such as when the responding team cannot find the patient. "Unknown" is used when the patient name is not known.

Discussion: This data element will be encrypted, stored separately and removed from the CEMSIS database after probabilistic matching. No patient identifying information will be available from the CEMSIS, only aggregate data.

EMSA #29   NHTSA #33

Data Element Name:	**Patient Street Address**
Data Element Group:	Patient Demographic Data
Definition:	The street address of the patient's residence
Type & Maximum Size:	Text
Code Set:	Free text entry, "not applicable", "unknown", "none" or "homeless"

Content: "Not applicable" is used when there is no patient, such as when the EMS responders cannot find the patient. "None" is used when there is no street address *per se* for the patient's residence (e.g., a rural residence that does not have mail delivery). "Unknown" is used when the patient's residence address has not been determined by the EMS responders. "Homeless" will be used when the individual does not have a domicile. The field includes apartment or suite numbers, etc.

Discussion: Although this data element will be encrypted, stored separately and purged from the CEMSIS database after probabilistic matching. No patient identifying information will be available from the CEMSIS, only aggregate data.

EMSA #30
NHTSA #34

Data Element Name:	**City of Residence**
Data Element Group:	Patient Demographic Data
Definition:	The city or community in which the patient's residence is located.
Type & Maximum Size:	Text
Code Set:	None

Content: This field contains the text name of the city or community in which the patient resides.

Discussion: Local city codes (if used) should be translated to the text name of the city to facilitate probabilistic linkage with other databases that contain the patient's residence city (e.g., hospital and/or vital statistics data).

EMSA #31   NHTSA #36

Data Element Name:	**State of Residence**
Data Element Group:	Patient Demographic Data
Definition:	State where patient resides.
Type & Maximum Size:	Alphanumeric
Code Set:	Standard postal/FIPS alphabetic codes for the 50 states and main outlying areas and territories of the United States. Canadian province Mexican state Other foreign country Unknown

Content: This field will be coded using the standard postal/FIPS (Federal Information Processing Standards) alphabetic codes for U.S. residents and the above numeric codes for foreign residents.

Discussion: The state location of the patient's residence may facilitate probabilistic linkage to hospital and/or vital statistics data. No patient identifying information will be available from the CEMSIS, only aggregate data

EMSA #32   NHTSA #37

Data Element Name:	**Zip Code of Residence**
Data Element Group:	Patient Demographic Data
Definition:	Postal zip code of the patient's residence.
Type & Maximum Size:	Alphanumeric; NNNNN
Code Set:	5-digit zip code Not applicable Unknown

Content: This field will be coded using the 5-digit postal zip code.

Discussion: Provides the postal zip code of the patient's residence.

EMSA #33   NHTSA #39

Data Element Name:	**Social Security Number**
Data Element Group:	Patient Demographic Data
Definition:	The patient's Social Security Number (SSN).
Type & Maximum Size:	Alphanumeric; N-NNNN
Code Set:	None; but, validation criteria exist

Content: Document the last 5 digits of the patient's Social Security Number (SSN) when it is available.

Discussion: When provided, the SSN will be encrypted, stored separately and purged from the CEMSIS Database after probabilistic matching. No patient identifying information will be available from the CEMSIS, only aggregate data

EMSA #34   NHTSA #40

Data Element Name:	**Date of Birth**
Data Element Group:	Patient Demographic Data
Definition:	The day, month, and year that the patient was born.
Type & Maximum Size:	Date; YYYYMMDD
Code Set:	None

Content: Day, month and year of the patient's birth.

Discussion: The date of birth (DOB) should be from the most reliable source available to the EMS responder (e.g., driver's license, parent of a child, etc).

The DOB will be encrypted, stored separately and purged from the CEMSIS database after matching is done. No patient identifying information will be available from the CEMSIS, only aggregate data.

EMSA #35   NHTSA #41

Data Element Name:	**Age**
Data Element Group:	Patient Demographic Data
Definition:	Age of patient in years, months, or days.
Type & Maximum Size:	Numeric
Code Set:	None

Content: Patient's age in years, months, or days.

Discussion: Patient's age is reported in years, months or days, as follows:

- If the patient is a less than one month old infant, the age is reported in days;

- If the patient is a child that is at least one month old but less than two years old, the age is reported in months;

- For all patients two years and older, the age is reported in years.

The patient's age is valuable in the absence of the DOB.

EMSA #36   no NHTSA #

Data Element Name:	**Age Units**
Data Element Group:	Patient Demographic Data
Definition:	Specifies the units used in the patient Age field (i.e., years, months, or days).
Type & Maximum Size:	Alphanumeric
Code Set:	Years Months Days

Content: The character will reflect Year, Month, or Day.

Discussion: Patient's age is reported in years, months or days, as follows:

- If the patient is a less than one month old infant, the age is reported in days;

- If the patient is a child that is at least one month old but less than two years old, the age is reported in months;

- For all patients two years and older, the age is reported in years.

EMSA #37

NHTSA #42

Data Element Name:	**Gender**
Data Element Group:	Patient Demographic Data
Definition:	Gender of patient.
Type & Maximum Size:	Alphanumeric
Code Set:	Female Male Unknown

Content: The character code will reflect female, male, or unknown.

Discussion: This data element is valuable for linkage to other files, and permits reporting of epidemiologic information by gender.

EMSA #38   no NHTSA #

Data Element Name:	**Weight**
Data Element Group:	Patient Demographic Data
Definition:	The approximate weight of the patient in kilograms.
Type & Maximum Size:	Numeric
Code Set:	None

Content: This weight should be a suitable estimate or for pediatric patients the approximate mid-point of the Broselow weight range, or other suitable estimate.

Discussion: The approximate weight (in kilograms) of the patient is essential for pediatrics. Estimates may be based upon the Broselow Pediatric Emergency Tape category that converts length into a weight range, and has the appropriate size and dose range for that weight range. Many emergency departments have pre-selected sets of equipment by the color code. For example, the purple set will have an appropriate sized ET tube or other equipment for a 10-11 kg child. This obviates the need for a lot of calculations during tense clinical moments.

EMSA #39   NHTSA #23

Data Element Name:	**PCR Identifier (PCR#)**
Data Element Group:	PCR Data
Definition:	The unique identifier for each Patient Care Record.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within the LEMSA for each EMS patient for a given EMS provider for a given EMS incident.

Discussion: The PCR Identifier will be used with the Incident Identifier and the Response Identifier to uniquely identify the record of care provided to a patient by the crew members from a particular EMS provider agency for a particular EMS incident.

Ideally, this identifier will be assigned automatically by the Computer Aided Dispatch (CAD) as part of the dispatch record, or by an automated PCR system, and passed electronically to each successive participant in the process of responding to the medical emergency (including the Response Unit, possibly the Base Hospital, the receiving Emergency Department/facility, and the admitting hospital).

EMSA #40   NHTSA #15

Data Element Name:	**Time Arrived at Patient's Side**
Data Element Group:	PCR Data
Definition:	Time the EMS responder arrived at the patient's side and began assessment.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the first EMS responder arrived at the patient's side and began assessing the patient's condition. Midnight is '000000' and begins the day. Use the default of "00" for seconds when necessary.

Discussion: Ideally, this is the time of arrival at the patient in Pacific Standard or Daylight Time as recorded using 'universal time' from a GPS receiver in a Personal Digital Assistant or other electronic device. It should be obtained electronically, if possible, to minimize manual entry effort and errors.

This time is of particular importance in situations where there is a significant delay between the arrival time of the response unit at the incident scene and the time at which EMS personnel can access the patient to begin assessment. It covers delays in reaching the patient because of fire, adverse conditions, or the need to travel to a distant place in a building.

In all cases this field should be used to record the actual time that patient assessment began.

EMSA #41 NHTSA #50

Data Element Name:	**Primary Impression**
Data Element Group:	PCR-Assessment Data
Definition:	The EMS provider's clinical impression that was <u>most</u> important in determining the care given to the patient (i.e., the procedures used and medications administered).
Type & Maximum Size:	Alphanumeric

Code Set: (by major category)	MEDICAL
	
	Cardiac/Chest Pain
	    Cardiac Arrest – non-traumatic
	    Chest pain – suspected cardiac origin
	    Chest Pain – non-specific
	    Rhythm Disturbance
	    Cardiac – non-specific
	
	Respiratory
	    Respiratory Arrest
	    Shortness of Breath – suspected asthma/COPD
	    Shortness of Breath - suspected pulmonary edema
	    Apneic Episode
	    Choking (Airway obstruction)
	    Respiratory – non-specific
	
	Neurologic
	    Altered Level of Consciousness (unspecified)
	    Near Syncope/Syncope
	    Neurologic Deficit (includes CVA/TIA)
	    Seizure – Active/Status Epilepticus
	    Post Seizure
	
	Non-Traumatic Shock
	    Anaphylactic
	    Cardiogenic
	    Hypovolemic
	    Unspecified Shock
	
	Poisoning/Drugs
	    Suspected Poisoning/Drugs – non-specific
	    Alcohol
	    Carbon Monoxide
	    Insecticides
	    Street Drugs-stimulant
	    Street Drugs - depressant
	    Other Drugs/Poisons
	    Household/industrial ingestion
	    Pharmaceutical ingestion
	
	Environmental
	    Heat Illness/Injury

	Cold Illness/Injury
	Envenomation
	Hazmat Exposure
	
	OB/GYN
	   Vaginal Bleed (non-pregnant)
	   Vaginal Bleed (pregnant)
	   Vaginal Bleed (unspecified)
	   Labor
	   Delivery
	   Newborn
	
	General Medical
	   Allergic Reaction (unspecified allergen)
	   Disturbance in Behavior
	   Phenothiazine Reaction
	   Hypoglycemia
	   Hyperglycemia
	   Abdominal Pain (including pelvic pain)
	   Vomiting/diarrhea
	   Gastrointestinal Bleeding
	   Weak/Dizzy/Sick/Nausea
	   Headache
	   Epistaxis (nosebleed)
	   Fever
	   Non-traumatic body pain
	
	   No Medical Complaint
	   Obviously Dead
	   Other

	TRAUMA
	   Single System Injury
	   Multi-System Injury
	   Traumatic Arrest

Content: This should be the code from the above list that was <u>most </u>important in determining the treatment protocol followed to provide EMS care to the patient.

Discussion: This data element contains the <u>single</u> clinical assessment which primarily determined the treatment provided by the EMS responder. It should be possible to determine whether the treatments or medications provided match protocols that relate to the clinical impression. When more than one choice is applicable to a patient, the responder should indicate the single most important clinical assessment that drove most of the plan of therapy and management. Additional clinical assessment codes should be entered under "Secondary Impression".

If a trauma code is selected it will always have a "Secondary Impression" to detail the injury.

Each EMS Provider Agency and/or EMS Agency may organize the clinical assessment codes within its own categories or as individual codes without categories.

Note: The following Poisoning/Drugs are recommended for additional code sets:

Antidepressants

Beta Blocker

Cocaine

Caustics/Corrosives

Methamphetamine

Opiates – Heroin

Opiates – non-Heroin

Petroleum Distillates

EMSA #42   NHTSA #50

Data Element Name:	**Secondary Impression**
Data Element Group:	PCR-Assessment Data
Definition:	The EMS provider's secondary clinical impression(s) that completes the description (in combination with the Primary Provider Impression) of the patient.
Type & Maximum Size:	Alphanumeric

Code Set:
(by major category)
	MEDICAL
	
	Cardiac/Chest Pain
	    Cardiac Arrest – non-traumatic
	    Chest pain – suspected cardiac origin
	    Chest Pain – non-specific
	    Rhythm Disturbance
	    Cardiac – non-specific
	
	Respiratory
	    Respiratory Arrest
	    Shortness of Breath - suspected asthma/COPD
	    Shortness of Breath - suspected pulmonary edema
	    Apneic Episode
	    Choking (Airway obstruction)
	    Respiratory – non-specific
	
	Neurologic
	    Altered Level of Consciousness (unknown cause)
	    Near Syncope/Syncope
	    Neurologic Deficit (includes CVA/TIA)
	    Seizure – Active/Status Epilepticus
	    Post Seizure
	
	Non-Traumatic Shock
	    Anaphylactic
	    Cardiogenic
	    Hypovolemic
	    Other Shock
	
	Poisoning/Drugs
	    Suspected Poisoning/Drugs – non-specific
	    Alcohol
	    Carbon Monoxide
	    Insecticides
	    Street Drugs-stimulant
	    Street Drugs - depressant
	    Other Drugs/Poisons
	    Household/industrial ingestion
	    Pharmaceutical ingestion
	
	Environmental

	Heat Illness/Injury Cold Illness/Injury
	Envenomation
	Hazmat Exposure
	
	OB/GYN
	    Vaginal Bleed (non-pregnant)
	    Vaginal Bleed (pregnant)
	    Labor
	    Delivery
	    Newborn
	
	General Medical
	    Allergic Reaction (unspecified allergen)
	    Disturbance in Behavior
	    Phenothiazine Reaction
	    Hypoglycemia
	    Hyperglycemia
	    Abdominal Pain (including pelvic pain)
	    Vomiting/diarrhea
	    Gastrointestinal Bleeding
	    Weak/Dizzy/Sick/Nausea
	    Headache
	    Epistaxis (nosebleed)
	    Fever
	    Non-traumatic body pain
	
	    No Medical Complaint
	    Obviously Dead
	    Other

	TRAUMA Head *(excluding face, neck and spine)* Face Neck *(excluding spine)* Cervical Spine Chest *(excluding spine)* Thoracic/Lumbar/Sacral Spine Upper Extremities Abdomen Genital/Buttocks/Pelvis Lower Extremities *Include one or more of the following codes after each injury code where applicable:* blunt penetrating with neurological deficit without neurological deficit Tension Pneumothorax Flail Chest Diffuse Abdominal Tenderness Abnormal Breath Sounds Amputation Laceration

	Deformity
	Soft Tissue Injury
	Pain
	Burn
	    superficial
	    partial/full thickness
	    3rd degree

Content: The EMS provider's secondary clinical impression code (s) that completes the description (in combination with the Primary Impression) of the patient.

Discussion: This data element contains additional clinical assessment that assists the EMS responder in determining necessary treatment. It should be possible to determine whether the treatments or medications provided match protocols that relate to the primary and/or secondary clinical impression.

The responder should indicate the single most important clinical assessment that drove most of the plan of therapy and management as a Primary Impression.

Each EMS Provider Agency and/or EMS Agency may organize the clinical assessment codes within its own categories or as individual codes without categories.

Note: The following Poisoning/Drugs are recommended for additional code sets:

Antidepressants

Beta Blocker

Cocaine

Caustics/Corrosives

Methamphetamine

Opiates – Heroin

Opiates – non-Heroin

Petroleum Distillates

EMSA #43   NHTSA #49

Data Element Name:	**Cause of Injury**
Data Element Group:	PCR-Assessment Data
Definition:	The ICD-9-CM E-Code(s) that describe the external cause or mechanism] of injury.
Structure:	May have multiple values per PCR Number
Type & Maximum Size:	A coded description of the values or attributes
	Intent *Include one of the following codes with each E-code:* Unintentional Intentional Unintentionally Self-Inflicted Intentionally Self-Inflicted Unknown
	Railway Unspecified railway incident Auto vs train Train vs pedestrian **Auto/Truck** vs fixed object vs bicycle vs motorcycle vs pedestrian vs auto **Other Vehicle** Motorcycle incident All-Terrain/Snowmobile vehicle involved Bicycle (non-motor vehicle involved) incident Horse involved incident Watercraft incident Aircraft incident Hang glider/parachute/balloon Trolley/Cable car incident Recreational Device incident (roller skates, skateboard, skis, snowboard, razor scooter) **Fall** Fall from height >20 ft (per ACS) Fall from height =20ft Fall from same level Fall down stairs

	Fall – unknown source
	Assault Shooting Stabbing Other Penetrating Force Blunt Force Suspected Sexual Assault Suspected Child/Adult Elder abuse
	Drowning/Near Drowning In container In pool Natural body of water Drowning/Near Drowning (non-specific)
	Other Injuries Natural Disaster Industrial machine/tool injury Household machine/tool injury Bites and Stings Hanging/Strangulation Suffocation Lightning Explosion Fireworks Electrocution (non-lightning) Barotrauma
	Unknown

Content: It is necessary to have a broad taxonomy for defining the external causes of injury, and this data element is coded in part according to the E codes in ICD-9. The cause of injury cannot be coded exactly as the detailed E-codes. The above code set is meant to provide a mechanism for sorting cause of injury and creating an association with the more specific E-codes. Transition to full code data collection may only include main categories of cause of injury. Subcategories may be added as data collection capabilities become more complete.

Discussion: It is recognized that the entire E code list is too cumbersome for field use, and the element may be collapsed into the codes that have been listed above. When possible, the E code should be defined in as much detail as is present in the E code definitions. The detail will provide additional value to injury prevention researchers. It has been traditional to attempt to assign a single E code to individual incidents. Multiple entries, however, aids in gathering better detail about injuries, and to eliminate confusion when the EMS provider must choose between two reasonable E codes.

EMSA # 44   NHTSA #

Data Element Name:	**Injury Contributing Factors**
Data Element Group:	PCR-Assessment Data
Definition:	Factors that may have contributed to the seriousness of the injury and influenced triage decisions
Structure:	May have multiple values per PCR Number
Type & Maximum Size:	A coded description of the values or attributes

	Ejection from vehicle
	Damaged Steering Wheel
	Death in same passenger compartment
	Extrication time >20 minutes
	Initial Speed >40 MPH
	Major Auto Deformity >20 inches
	Auto-pedestrian/auto-bicycle with significant
	  (>5 MPH) impact
	Pedestrian thrown or run over
	Motorcycle incident >20 MPH or with separation of
	  rider from bike
	Age <5 or >55
	Cardiac disease, respiratory disease
	Insulin-dependent diabetes, cirrhosis, or morbid
	  obesity
	Pregnancy
	Immunosuppressed
	Patient with bleeding disorder or patient on
	  anticoagulants

Content:

Discussion:

EMSA #45   **NHTSA #51**

Data Element Name:	**Pre-existing Condition**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's medical history conditions that were considered when determining the appropriate patient care.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric
Code Set:	Cardiac Disease Respiratory Disease Immunocompromised Diabetes Chronic Renal Failure Cancer Psychiatric Problems Seizure Disorder Neurologic Deficit Pregnancy Alcohol/Substance Abuse Recent Surgery Hx of current complaint None Unknown

Content: Codes reflecting patient's past medical history as described by the patient or informed family/friend.

Discussion: Pre-existing conditions may affect the protocols followed by EMS responders. The data element is intended to capture information as understood by EMS providers at the scene, not as defined later in the medical record of the hospital. Thus, if the EMS responder finds out that a patient has several pre-existing conditions after he or she arrives at the hospital, those conditions should not be coded in this data element.

EMSA #46   NHTSA #55

Data Element Name:	**Safety Factors**
Data Element Group:	PCR-Assessment Data
Definition:	Safety factors that affected the incident.
Type & Maximum Size:	Multi-valued, Alphanumeric
Code Set:	**Auto** Belts: Restrained / Unrestrained / Unknown Restraint Use Seats: Infant/Child Seat / Booster Seat / No Seat Used / Unknown Seat Use Airbags Deployed: Front Airbag / Side Airbag / No Airbag Other Child left unattended in auto / Person riding on outside of moving vehicle / Person riding unrestrained in bed of truck **Other Vehicle/Recreational Devices** Helmets: Helmet Worn / No Helmet Worn / Helmet Use Unknown Pads: Pads Worn / No Pads Worn / Pads Use Unknown **Watercraft** Personal Flotation Device PFD Worn / PFD not Worn / PFD Use Unknown **Swimming Pool** Fencing Pool surrounded by barrier fence Gate Self-closing, self latching gate

	Firearms	Unsafe storage Trigger Lock employed
	Poisons/ **Medications**	Easy access to poisons/medications
	Windows	Window guard in place
	Safety Rails	Safety rails installed at scene of incident
	Obstacle/ **Hazard**	Obstructions present contributing to injury

Content: One or more of the above codes can be recorded. For example, an auto crash involving a small child in an infant/child seat secured only by a lap belt with front and side airbags that did not deploy would be coded 'LB;CS;NA', while another child in the car might be coded 'NS;NB;NA' if neither special seats nor restraint belts were used and the airbags had not deployed.

Discussion: Provides important information about safety device use in motor vehicle crashes, boating incidents, and industrial incidents. EMS personnel should be as complete as possible when coding for each category to assist in injury prevention activities.

AUTO

Belts: Restrained: Patient is restrained in auto with seat belt at time of incident.

Unrestrained: Patient is NOT restrained in auto with seat belt at time of incident.

Unknown Restraint Use: Unknown whether patient was restrained in auto with seat belt at time of incident.

Seats: Infant/Child Seat: Infant/Child <40 pounds secured in child restraint device with seat belt secured at time of incident

Booster Seat : Child >40 pounds and <60 pounds secured in booster seat with seat belt at time of incident.

No Seat Used: Infant/Child not restrained in any type of child restraint device at the time of incident.

Unknown Seat Use: Unknown if infant/child was restrained in any type of child restraint device at time of incident.

Airbags
Deployed: Front Airbag: Front airbag deployed at the time of the incident into the patient's passenger space.

Side Airbag: Side airbag deployed at the time of the incident into the patient's passenger space.

No Airbag: Passenger compartment does not contain an airbag.

Other: Child left unattended in auto: Child <6 years left in a motor vehicle unattended for one minute or longer.

Person riding on outside of moving vehicle: Patient injured while riding on the outside of a moving vehicle such as the running board or sitting in window.

Person riding in bed of truck with no restraint device such as seat belt with installed seat.

OTHER VEHICLE/RECREATIONAL DEVICES

Helmets: Helmet Worn: Patient was wearing an intact bicycle/motorcycle helmet at the time of incident.

No Helmet Worn: Patient was NOT wearing a bicycle/motorcycle helmet at the time of incident.

Helmet Use Unknown: Unknown whether patient was wearing a bicycle/motorcycle helmet at time of incident.

Pads: Pads Worn: Patient was wearing protective pads at the time of incident.

No Pads Worn: Patient was NOT wearing protective pads at the time of incident.

Pads Use Unknown: Unknown if patient was wearing protective pads at the time of incident.

WATERCRAFT

Personal   PFD Worn: Patient was wearing PFD at the time of Flotation incident.
Device:
PFD not Worn: Patient was NOT wearing PFD at time of incident.

PFD Use Unknown: Unknown if patient was wearing PFD at time of incident.

SWIMMING POOL

Fencing   Pool surrounded by barrier fence: A barrier fence is a structure that surrounds all sides of the immediate pool area. It does not allow access except through a secure gate.

Gate   Secure Gate in place: A secure gate is a functioning, self-closing, self-latching gate.

FIREARMS

Storage   Unsafe storage: Refers to a gun that is not in a locked container and out of reach of children

Locks   Trigger Lock employed: Trigger lock is secure on gun.

POISONS/
MEDICATIONS

Access   Easy access to poisons/medications: Includes
                containers without child-resistant caps and easily
                accessible to children. Also includes poisons stored in
                an unsafe manner such as easily reachable cabinets
                without locks.

WINDOWS

Guards   Window guard in place: Device or barrier specifically
                intended to prevent a small child from falling through a
                window. This can include bars, dowel or locking pin.
                Does not include standard screen.

SAFETY RAILS

Rails   Safety rails at place of incident: Rail installed
                specifically intended to grab on to.

OBSTACLE/HAZARD

Obstacles   Obstructions present contributing toinjury: The
                existence of obstruction or impediments that interfered
                with the ability to move freely through the environment
                (boxes, stacks of newspapers) and caused the patient to
                fall (throw rugs).

EMSA #47   NHTSA #56

Data Element Name:	**Factors Affecting EMS Delivery of Care**
Data Element Group:	PCR-Assessment Data
Definition:	Codes used to identify those factors that affected EMS delivery of patient care.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric
Code Set:	Adverse Weather Adverse Road Conditions Crowd Control Multiple Casualty Incident Do Not Resuscitate Order Hazardous Material Language Barrier Combative Patient Law Enforcement Resource Allocation Problem Extrication Unsafe Scene Vehicle Problems Physician on Scene Other

Content: Unsafe Scene includes presence of gunfire live electrical wires, etc. Law Enforcement is used for instances where police, sheriff, or other law enforcement officers delayed/prevented access. Vehicle problems mean problems with the EMS responder vehicle itself, not with vehicles that obstructed traffic. Extrication is included here because it relates more to the environment in which EMS responders must work and less to the medical care of the patient.

Discussion: For response time evaluations, this data element may explain delays encountered in the system. For instance, the time to scene would be expected to be prolonged if there was a blizzard, or if gunfire prevented EMS responders from patient access. If there was no problem with EMS delivery, this data element would be left blank.

EMSA #48   NHTSA #57

Data Element Name:	**Suspected Alcohol/Drug Use**
Data Element Group:	PCR-Assessment Data
Definition:	Patient suspected to be under the influence of alcohol or drugs.
Type & Maximum Size:	Alphanumeric
Code Set:	Yes No

Content: Should be coded as Yes whenever the EMS responder suspects alcohol and/or drug use by the patient contributed to at the time of the incident. If alcohol or drugs are totally unrelated to the incident, this field should be coded as 'N'. If EMS personnel do not suspect alcohol and/or drug use at the time of the incident, this field should be coded as "N".

Discussion: Important data element for injury research, permitting reports of value to public health researchers and policy makers.

EMSA #49   NHTSA #62

Data Element Name:	**Witnessed Cardiac Arrest**
Data Element Group:	PCR-Assessment Data
Definition:	An identifiable witness saw (or heard) a collapse or signs of distress that were due to cardiac arrest.
Type & Maximum Size:	Alphanumeric
Code Set:	Yes No

Content: 'No' should be used when there was no witness of the onset of a cardiac arrest.

Discussion: Cardiac arrest is the cessation of cardiac mechanical activity, confirmed by the absence of a detectable pulse, unresponsiveness, and apnea (or agonal, gasping respirations).

EMSA #50   NHTSA #61

Data Element Name:	**Estimated Time of Witnessed Cardiac Arrest**
Data Element Group:	PCR-Assessment Data
Definition:	The time at which an identifiable witness saw (or heard) a collapse or signs of distress that were due to cardiac arrest.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 -- 59

Content: The estimated hour and minute, that a bystander or an EMS responder witnessed the cardiac arrest. Midnight is '000000' and begins the day.

Discussion: This is the time at which a collapse or signs of distress related to cardiac arrest were seen (or heard) by an identifiable witness (either bystander or EMS responder).

Necessary (with Time of Spontaneous Circulation/Ventilation) to calculate the *Utstein Patient Clock.*

EMSA #51   NHTSA #65

Data Element Name:	**Pulse Rate**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's palpated or auscultated pulse rate expressed in number per minute.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Numeric
Code Set:	None

Content: The patient's pulse rate in number per minute that was assessed by EMS personnel.

Discussion: The pulse rate is a component of various triage scoring systems, and permits a rough assessment of the severity of illness of the patient.   This data element is based on the physical examination of the patient, and the pulse must be palpated or auscultated. An electrical rhythm is not sufficient, as the patient could have pulseless electrical activity. In this instance, the correct value of this data element is '000'.

EMSA #52   NHTSA #66

Data Element Name:	**Initial Cardiac Rhythm**
Data Element Group:	PCR-Assessment Data
Definition:	Initial monitored cardiac rhythm (i.e., EKG code) as determined by EMS personnel.
Type & Maximum Size:	Alphanumeric
Code Set:	Sinus Rhythm Sinus Bradycardia Narrow Complex Tachycardia Wide Complex Tachycardia Ventricular Tachycardia Atrial Fibrillation/Flutter 1st Degreee Heart Block 2nd Degree Heart Block 3rd Degree Heart Block Paced rhythm Pulseless Electrical Activity Idioventricular Rhythm Asystole Ventricular Fibrillation Other rhythm from 60-100 (not otherwise listed) Unknown Premature Ventricular Contractions Premature Atrial Contractions

Content: This field contains the code(s) from the above list for the patient's initial cardiac rhythm that was monitored by EMS personnel.

<u>NOTE</u>: Where PVC and/or PAC are observed in addition to the primary rhythm, the code for the primary rhythm occurs first, and 'PVC' and/or 'PAC' follow(s) the primary code.

Discussion: The initial monitored rhythm is used to assess the survival rate after certain rhythms.

EMSA #53   NHTSA #68

Data Element Name:	**Respiratory Rate**
Data Element Group:	PCR-Assessment Data
Definition:	Unassisted patient respiratory rate expressed as number per minute.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Numeric
Code Set:	None

Content: The patient's unassisted respiratory rate in number per minute that was observed by EMS personnel.

Discussion: The respiratory rate is a component of several triage scoring systems and provides some assessment of severity of illness or injury. If a patient is not breathing and regardless of artificial ventilation, this data element should be coded as '000'.

EMSA #54   NHTSA #69

Data Element Name:	**Respiratory Effort**
Data Element Group:	PCR-Assessment Data
Definition:	A code that indicates the respiratory effort required by the patient to breathe.
Structure:	One per Respiratory Rate
Type & Maximum Size:	Alphanumeric
Code Set:	Normal Labored Absent

Content: The code from the above list that indicates the effort required by the patient to breathe.

Discussion: Respiratory effort is an essential component of pediatric emergency assessment, and is a major part of curricula dealing with pediatric emergencies. Respiratory effort is also potentially valuable in assessing adult patients.

EMSA #55   NHTSA #70

Data Element Name:	**Systolic Blood Pressure**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's systolic blood pressure.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Numeric
Code Set:	None.

Content: The patient's systolic blood pressure in millimeters of mercury (mmHg) as assessed by EMS personnel.

Discussion: Important component of several scoring systems for triage, and permits some assessment of acuity of patient.

EMSA #56   NHTSA #71

Data Element Name:	**Diastolic Blood Pressure**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's diastolic blood pressure.
Structure:	One per Systolic Blood Pressure
Type & Maximum Size:	Alphanumeric
Code Set:	Palpated Number monitored

Content: The patient's diastolic blood pressure in millimeters of mercury (mmHg) as assessed by EMS personnel. If the blood pressure is not ausculated, the diastolic blood pressure shall be documented as palpated.

Discussion: Important component of several scoring systems for triage, and permits some assessment of acuity of patient.

EMSA #57   NHTSA #72

Data Element Name:	**Perfusion**
Data Element Group:	PCR-Assessment Data
Definition:	Patient skin perfusion, expressed as normal or decreased.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric
Code Set:	Normal Decreased

Content: The code from the above list that indicates the patient's skin perfusion.

Discussion: This field is essential for children. Normal may be assessed as warm, pink, and/or with a capillary refill time of 2 or less seconds. Decreased may be assessed as cool, pale, mottled, dusky, and/or with a capillary refill time of greater than 2 seconds.

If the patient is hypothermic or febrile, this may affect skin perfusion. However, the skin perfusion should be scored consistently as defined above.

This code is not used to reflect decreased perfusion in an extremity due to an isolated injury.

NOTE: The EMS for Children Technical Advisory Committee will advise EMSA on the development of data elements to reflect the Pediatric Assessment Triangle.

EMSA #58   NHTSA #73

Data Element Name:	**Glasgow Eye Opening Component**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's eye opening component of the Glasgow coma scale.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Numeric
Code Set:	1 None 2 Opens eyes in response to painful stimulation 3 Opens eyes in response to verbal stimulation 4 Opens eyes spontaneously

Discussion: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems.

EMSA #59   NHTSA #74

Data Element Name:	**Glasgow Verbal Component**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's verbal component of the Glasgow coma scale.
Structure:	One per Glasgow Eye Opening Component
Type & Maximum Size:	Numeric

Code Set:	For patients >5years:
	    1 = None
	    2 = Non-specific sounds
	    3 = Inappropriate words
	    4 = Confused conversation or speech
	    5 = Oriented and appropriate speech
	
	For patients 2-5 years:
	    1 = None
	    2 = Grunts
	    3 = Cries and/or screams
	    4 = Inappropriate words
	    5 = Appropriate words
	
	For patients 0-23 months:
	    1 = None
	    2 = Persistent cry, grunting
	    3 = Inappropriate cry
	    4 = Cries, inconsolable
	    5 = Smiles, coos, cries appropriately

Content: If the patient is intubated and deeply comatose, then this data element is coded as 1 for none, since there was no verbal response at the time of intubation. However, if the patient is intubated but not deeply comatose, and there is a possibility of verbal response, it is difficult to apply the Glasgow coma scale. The EMS responder can ask questions and if the patient can nod his head or blink eyes, etc. appropriately, then this element is coded as 5.

Discussion: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems.

EMSA #60   NHTSA #75

Data Element Name:	**Glasgow Motor Component**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's motor component of the Glasgow coma scale.
Structure:	One per Glasgow Eye Opening Component
Type & Maximum Size:	Numeric
Code Set:	For patients >5years: 1 = None 2 = Extensor posturing in response to painful stimulation 3 = Flexor posturing in response to painful stimulation 4 = General withdrawal in response to painful stimulation 5 = Localization of painful stimulation 6 = Obeys commands with appropriate motor response For patients up to 5 years: 1 = None 2 = Extensor posturing in response to painful stimulation 3 = Flexor posturing in response to painful stimulation 4 = General withdrawal in response to painful stimulation 5 = Localization of painful stimulation 6 = Spontaneous

Content:

Discussion: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems.

EMSA #61   NHTSA #76

Data Element Name:	**Glasgow Coma Score**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's total Glasgow coma scale score.
Structure:	One per Glasgow Eye Opening Component
Type & Maximum Size:	Numeric
Code Set:	Calculated

Content: The calculated Glasgow Coma Score is the sum of the eye opening, verbal and motor response components.   The range of the score is 3 to 15.

Discussion: This important component of several triage scoring systems provides information about the severity of a neurological disorder.

EMSA #62   NHTSA #77

Data Element Name:	**Revised Trauma Score**
Data Element Group:	PCR-Assessment Data
Definition:	Patient's revised trauma score.
Type & Maximum Size:	Numeric
Code Set:	Calculated

Content: The revised trauma score is calculated from other data elements. It is the sum of a respiratory rate component, systolic blood pressure component, and a neuralgic component. If the score cannot be calculated because of absent component data or is unknown, the score should be coded as '88'.

Respiratory Rate Component
- 4   10 - 29 per minute
- 3 $\geq$30 per minute
- 2   6 - 9 per minute
- 1   1 - 5 per minute
- 0   None spontaneous

Systolic Blood Pressure Component
- 4 $\geq$90 mm Hg
- 3   76 - 89 mm Hg
- 2   50 - 75 mm Hg
- 1   1 - 49 mm Hg
- 0   No pulse

Neurolgic Component
- 4   Glasgow coma score 13 - 15
- 3   Glasgow coma score 9 - 12
- 2   Glasgow coma score 6 - 8
- 1   Glasgow coma score 4 - 5
- 0   Glasgow coma score 3

Discussion: The revised trauma score is a triage scoring system that may be used to categorize injured patients in an EMS system and is calculable from other data elements that are core elements of the uniform data set. Other scoring systems include the CRAMS, the Trauma Index, the Trauma Score (Champion), the Glasgow coma scale, APACHE, PRISM, Hanover Intensive Score (HIS), AIS and ISS.

EMSA #63   no NHTSA #

Data Element Name:	**Base Hospital Identifier**
Data Element Group:	PCR-Treatment Data
Definition:	The identifier for the base hospital or other facility from which an EMS provider received medical guidance.
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: This identifier must be unique within California, and should be the HIPAA National Provider Identifier.

Discussion: This field identifies the hospital that was the source of medical direction for Prehospital triage, treatment, and patient routing when contacted.

EMSA #64   NHTSA #58

Data Element Name:	**Estimated Initial Time CPR Started**
Data Element Group:	PCR-Treatment Data
Definition:	The hour and minute and second that CPR was started by a bystander or by an EMS responder.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 -- 59

Content: The estimated hour and minute that CPR was initiated by a bystander or by an EMS responder. Midnight is '000000' and begins the day.

Discussion: Ideally, the Time CPR Started by an EMS responder is in Pacific Standard or Daylight Time as determined automatically using 'universal time' from a GPS receiver in a Personal Digital Assistant or other electronic device. It should be obtained electronically, if possible, to minimize manual entry effort and errors.

For CPR initiated by a bystander, the time will usually be an estimate by the initiator or an on-looker.

This time is a *core* data element for the *Utstein Style Template* for analysis of attempted cardiac arrest resuscitation.

EMSA #65   NHTSA #59

Data Element Name:	**Initial Provider of CPR**
Data Element Group:	PCR-Treatment Data
Definition:	The code for the person who initiated CPR on the patient.
Structure:	One per Time CPR Started
Type & Maximum Size:	Alphanumeric
Code Set:	Bystander EMS Personnel

Content: The character code for the person who provided CPR. This code is multi-valued and associated with the Time CPR Started so that it can be used to report multiple attempts at CPR (e.g., CPR performed first by a bystander, and then by an EMS responder).

Discussion: These codes classify the CPR provider into one of two groups: bystander or emergency personnel. Per *the Utstein Style*, emergency personnel are "persons who respond to a medical emergency in an official capacity as part of an organized response team…physicians, nurses, and paramedics who witness a cardiac arrest in a public setting and initiate CPR but do *not* respond as part of an organized team are *not* emergency personnel."

Bystander

This includes anyone who is not part of an organized EMS response team. Again, per *the Utstein Style*, this indicates "an attempt to perform basic cardiopulmonary resuscitation (CPR) by someone who is *not* part of an organized emergency response system. In general, this will be the person who witnessed the arrest.

EMS Personnel

This includes anyone who is part of an organized EMS response team.

EMSA #66   NHTSA #60

Data Element Name:	**Time CPR Discontinued**
Data Element Group:	PCR-Treatment Data
Definition:	The hour and minute and second when CPR was discontinued because it was considered futile.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59

Content: The hour, minute, and second when chest compressions and ventilations ceased. Midnight is '000000' and begins the day.

Discussion: The time CPR was discontinued by an EMS responder may be a manually observed time (i.e., one that is not determined using GPS universal time).

This time is a *core* data element for the *Utstein Style Template* for analysis of attempted cardiac arrest resuscitation.

EMSA #67   NHTSA #63

Data Element Name:	**Time of First Defibrillatory Shock**
Data Element Group:	PCR-Treatment Data
Definition:	The hour and minute and second that the first defibrillatory shock was delivered.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that a defibrillator was used to apply the first shock to the patient by a bystander or an EMS responder. Midnight is '000000' and begins the day.

Discussion: :   Ideally, the Time of Defibrillatory Shock is in Pacific Standard or Daylight Time as determined automatically using 'universal time' from a GPS receiver in a Personal Digital Assistant or other electronic device (e.g., Automatic External Defibrillator [AED]). It should be obtained electronically, if possible, to minimize manual entry effort and errors.

This time is a *core* data element for the *Utstein Style Template* for analysis of attempted cardiac arrest resuscitation.

EMSA #68   no NHTSA #

Data Element Name:	**Provider of Defibrillatory Shock**
Data Element Group:	PCR-Treatment Data
Definition:	The code for the person who defibrillated the patient.
Structure:	One per Time of Defibrillatory Shock
Type & Maximum Size:	Alphanumeric
Code Set:	Bystander EMS Personnel

Content: The two character code for the person who provided a defibrillatory shock. This code is multi-valued and associated with the Time of Defibrillatory Shock so that it can be used to report multiple defibrillation attempts (e.g., performed first by a bystander, and then by an EMS responder).

Discussion: These codes classify the Provider of Defibrillatory Shock into one of two groups: bystander or emergency personnel, as does *the Utstein Style* for CPR providers.

Bystander

This includes anyone who is not part of an organized EMS response team.

EMS Personnel

This includes anyone who is part of an organized EMS response team.

EMSA #69   NHTSA #64

Data Element Name:	**Return of Spontaneous Circulation**
Data Element Group:	PCR-Treatment Data
Definition:	Spontaneous cardiovascular circulation was restored to the patient at any time in the prehospital setting.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric
Code Set:	Yes No

Content: Was there a return to spontaneous cardiovascular circulation upon arrival at hospital? Yes or No

Discussion:

EMSA #70   NHTSA #78

Data Element Name:	**Procedure Name**
Data Element Group:	PCR-Treatment Data
Definition:	Identification of procedure attempted or performed on patient.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric; NN.NN

Code Set:	CPR
	Defibrillation (manual)
	Defibrillation (auto)
	
	Synchronized cardioversion
	
	Airway Management
	    Removal of foreign body
	    Valsalva maneuver
	    Oxygen by mask
	    Oxygen by cannula
	    Bag/Valve/Mask
	    Oropharyngeal airway
	    Nasopharyngeal airway
	    Esophageal airway
	    Esophageal/tracheal airway
	    Rapid Sequence Intubation
	    Endotracheal intubation
	    Nasotracheal intubation
	    Needle Cricothyrotomy
	    Needle thoracostomy
	    Monitor thoracostomy tube(s)
	    Assisted ventilation (positive pressure)
	    Suction
	
	Nasogastric tube insertion
	ECG monitoring
	12-Lead EKG
	External cardiac pacing
	Obtain venous blood sample
	
	Fluid Management
	
	    Saline lock
	    Intravenous catheter
	    Intraosseous catheter
	
	Monitor pre-existing vascular access
	
	Monitor and adjust IV solutions

	containing potassium
	containing heparin
	containing nitroglycerin
	Glucose monitoring device
	MAST (military anti-shock trousers)
	Immobilization
	Splint of extremity (non-traction)
	Traction splint
	Spinal
	Extrication
	Burn care
	Obstetrical care (delivery)
	Bleeding controlled
	Stroke Screen/Assessment

Content: The procedures listed above include those in the scope of practice for EMT-I, EMT-II and EMT-P and optional scope of practice approved for individual local EMS agencies. The coding system used is the ICD-9 Procedure Classification.

Discussion: Intended to provide planners and educators with information about which procedures are conducted in the field, by whom, and for what indications. Procedures are defined here as anything done by way of assessment or treatment of the patient. Thus application of spinal immobilization is a treatment, use of a cardiac monitor is a tool of assessment, and drawing blood tubes is neither a specific treatment nor a means of field assessment. All of these would be considered procedures for purposes of this data element.

EMSA #71   **no NHTSA #**

Data Element Name:	**Procedure Performed By**
Data Element Group:	PCR-Treatment Data
Definition:	This number identifies the personnel who performed a documented procedure, regardless of success. At Provider and LEMSA discretion, the number may be the crew member number (e.g., #1, #2, #3, etc.), or it may be the Paramedic license number, EMT certification number or RN/MD license number that uniquely identifies the crew member within California.
Structure:	One per Procedure Name
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: The number is left-justified.

Discussion: The paramedic license number, EMT certification numbers and RN/MD license numbers that uniquely identify the personnel who participated in an EMS response will be used only at the Provider and LEMSA level unless the individual Provider approves inclusion at the state level. Before data is sent to EMSA for the statewide CEMSIS database, LEMSAs will convert paramedic license number, EMT certification numbers and RN/MD license numbers to numbers that uniquely identify each member of an EMS crew (e.g., #1, #2, #3, etc.) without losing the correct Crew Member Type for each.

EMSA #72   NHTSA #79

Data Element Name:	**Procedure Attempts**
Data Element Group:	PCR-Treatment Data
Definition:	Total number of attempts for each procedure attempted, regardless of success.
Structure:	One per Procedure Name
Type & Maximum Size:	Alphanumeric
Code Set:	None

Content: For procedures that are performed on the patient, this field indicates the number of attempts per EMS personnel regardless of success.

Discussion: In most instances, the number will be '1'. This data element permits educators and researchers to know whether certain procedures are posing particular technical problems in the field. The definition of "attempt" for procedures is defined as follows:

Esophageal airway: Insertion of the esophageal airway beyond the teeth with the intent of placing the esophageal airway in an individual patient.

Esophageal/tracheal Airway: Insertion of the esophageal/tracheal airway beyond the teeth with the intent of placing the esophageal/tracheal airway in an individual patient.

Endotracheal intubation: Insertion of an endotracheal tube beyond the teeth with the intent of placing an endotracheal tube in an individual patient.

Foreign Body Removal: Insertion of the magill forceps with the intent of removing a foreign body from the airway

Intraosseous catheter: Insertion of the needle through the skin with the intent of establishing an intraosseous line.

Nasotracheal intubation: Insertion of an endotracheal tube beyond the nares with the intent of placing a nasotracheal tube in an individual patient.

Needle Cricothyrotomy: Insertion of the needle through the skin with the intent of performing a needle cricothyrotomy.

Nasogastric tube insertion: Insertion of a nasogastric tube passed the nares with the intent of placing a nasogastric tube in an individual patient.

Saline lock: Insertion of the needle through the skin with the intent of establishing a saline lock.

Venous Blood Sample: Insertion of the needle through the skin with the intent of drawing a blood sample.

Recommended:

Intravenous catheter: Insertion of the needle through the skin with the intent of establishing an intravenous line.

EMSA #73   no NHTSA #

Data Element Name:	**Procedure Result/Success**
Data Element Group:	PCR-Treatment Data
Definition:	The result/success of a procedure attempted on a patient.
Structure:	One per Procedure Name
Type & Maximum Size:	Alphanumeric
Code Set:	Successful Unsuccessful

Content: Documentation of result/success of each procedure attempted on a patient by pre-hospital personnel. Result/Success should be documented for each personnel who attempts a procedure. The following procedures should have result/success documented:

Esophageal airway

Esophageal/tracheal airway

Endotracheal intubation

Foreign body removal from airway

Nasotracheal intubation

Needle Cricothyrotomy

Needle thoracostomy

Nasogastric tube insertion

Obtain venous blood sample

Saline lock

Intravenous catheter

Intraosseous catheter

Discussion: This data element permits educators and researchers to know whether certain procedures are posing particular technical problems in the field.

EMSA #74   NHTSA #80

Data Element Name:	**Medication Name**
Data Element Group:	PCR-Treatment Data
Definition:	Identification of medication given to the patient (or monitored) by the pre-hospital personnel.
Structure:	May have multiple values per PCR Identifier
Type & Maximum Size:	Alphanumeric
Code Set:	Normal Saline 25% Dextrose 50% Dextrose Oral Glucose/Sugar Solutions Activated Charcoal Adenosine Aerosolized or nebulized beta-2 specific bronchodilator Amiodarone Aspirin Atropine Sulfate Beta Agonist (any drug) Blood & Blood Products Calcium Chloride Diazepam (Valium®) Diazepam (rectal Valium®) Diphenhydramine Hydrochloride (Benadryl®) Dopamine Hydrochloride Epinephrine Furosemide (Lasix®) Glucagon Heparin (intravenous) – IFT ONLY Ipratropium Bromide (Atrovent®) Lidocaine Hydrochloride Mannitol Midazolam Magnesium Sulfate Morphine Sulfate Naloxone Hydrochloride Nitroglycerin Preparations (except IV) Nitroglycerin (intravenous) IFT ONLY

	Nitrous Oxide
	Oxygen
	Oxytocin (Pitocin®)
	Procainamide
	Potassium Chloride IFT ONLY
	Pralixome Chloride 2 (2 PAM)
	Rocuronium Bromide (Zemuron®)
	Sodium Bicarbonate
	Sodium Thiosulfate
	Succinylcholine Chloride (Anectine)
	Syrup of Ipecac
	Tissue Plasminogen Activator IFT ONLY
	Verapamil

Content: The medications listed above include those in the scope of practice for EMT-I, EMT-II and EMT-P and optional scope of practice approved for individual local EMS agencies. Some are approved only for inter-facility transfer (IFT) patients.

Discussion: Intended to provide planners and educators with information about which medications are administered in the field, by whom, and for what indications.

EMSA #75   no NHTSA #

Data Element Name:	**Medication Dose**
Data Element Group:	PCR-Treatment Data
Definition:	The dose for each medication given to a patient.
Structure:	One per Medication Name
Type & Maximum Size:	Numeric
Code Set:	None

Content: Documentation of the dosage for each medication administered to a patient including the decimal point. PRN orders should be documented in the open comment field on the PCR, but not recorded in this field unless the medication is actually given. When giving IV fluid, the total amount given at the time of arrival at the hospital or the IV is discontinued should be recorded here.

Discussion: Documentation of dosage should only be for those medications actually administered to a patient. When giving IV fluids, the amount given in the field until the time of arrival at the hospital should be recorded here.

PRN orders should not be documented using this data element.

If a dosage range is ordered for titration, the order may be documented in the open comment section of the PCR, but the actual dosage administered should be entered in this field.

EMSA #76   no NHTSA #

Data Element Name:	**Medication Dose Unit**
Data Element Group:	PCR-Treatment Data
Definition:	The dose unit for each medication given to a patient.
Structure:	One per Medication Dose
Type & Maximum Size:	Alphanumeric
Code Set:	cc grain gram milliequivalents milligrams

Content: Documentation of the dosage unit for each medication administered to a patient.

Discussion:

EMSA #77   no NHTSA #

Data Element Name:	**Medication Route**
Data Element Group:	PCR-Treatment Data
Definition:	The route used for each medication given to a patient.
Structure:	One per Medication Name
Type & Maximum Size:	Alphanumeric
Code Set:	Oral Intravenous Push Intravenous Drip Intramuscular Intraosseaous Endotracheal Inhalation Subcutaneous Transcutaneous Rectal Sublingual Topical

Content: Documentation of route used for each medication given to a patient.

Discussion: This data element documents the route for each medication as some medications can be administered multiple routes.

EMSA #78   no NHTSA #

Data Element Name:	**Medication Administered By**
Data Element Group:	PCR-Treatment Data
Definition:	This number identifies the EMS personnel who administered medication, regardless of success. At Provider and LEMSA discretion, the number may be the crew member number (e.g., #1, #2, #3, etc.), or it may be the Paramedic license number, EMT certification number or RN/MD license number that uniquely identifies the crew member within California.
Structure:	One per Medication Name
Type & Maximum Size:	Alphanumeric
Code Set:	Determined by LEMSA and Provider Agency to include: Patient/bystander

Content:

Discussion: The paramedic license number, EMT certification numbers and RN/MD license numbers that uniquely identify the EMS personnel who participated in an EMS response will be used only at the Provider and LEMSA level unless the individual Provider approves inclusion at the state level. Before data is sent to EMSA for the statewide CEMSIS database, LEMSAs will convert paramedic license number, EMT certification numbers and RN/MD license numbers to numbers that uniquely identify each member of an EMS crew (e.g., #1, #2, #3, etc.) without losing the correct Crew Member Type for each.

In some cases, patients and or family may deliver the medication to the patient.

EMSA #79   no NHTSA #

Data Element Name:	**Medication Result/Success**
Data Element Group:	PCR-Treatment Data
Definition:	The result of a medication given to a patient.
Priority:	Recommended
Structure:	One per Medication Name
Type & Maximum Size:	Alphanumeric
Code Set:	Desired Effect Achieved
	Desired Effect Not Achieved
	Unknown Effect

Content: Documentation of result of medications given to a patient by pre-hospital personnel.

Discussion: This data element permits the evaluation of the benefits of medications given in the field.

EMSA #80   **no NHTSA #**

Data Element Name:	Pain Scale Prior to Treatment
Data Element Group:	PCR-Treatment Data
Definition:	Scale of pain prior to pain management in the prehospital setting.
Structure:	One per patient receiving pain management
Type & Maximum Size:	Alphanumeric
Code Set:	To be determined

Content:

EMSA #81   **no NHTSA #**

Data Element Name:	Pain Scale After Treatment
Data Element Group:	PCR-Treatment Data
Definition:	The result of a pain management in the prehospital setting.
Structure:	One per patient receiving pain management
Type & Maximum Size:	Alphanumeric
Code Set:	To be determined

EMSA #82   NHTSA #47

Data Element Name:	**Incident/Patient Disposition**
Data Element Group:	PCR-Treatment Data
Definition:	End result of EMS response.
Type & Maximum Size:	Alphanumeric
Code Set:	**Transported** Transported to receiving facility Transferred care to other EMS unit Transported but patient/parent refused care (AMA) **Not Transported** Treated and not transported by EMS personnel Treated but patient/parent refused transport (AMA) Patient/parent refused care and transport (AMA) No treatment required Patient dead upon arrival of EMS responders Discontinued resuscitation **Other** Response cancelled No patient found

Content: One of the above codes that indicates the disposition of the EMS response.

Discussion: Allows analysis of the EMS system in terms of EMS response disposition.

Transported to receiving facility

This code means that the EMS responder providing the data record only transported the patient to the receiving facility. Transport may be to any valid destination, as defined for the destination data element. For example, if one EMS responder transports a patient to a rendezvous point with another EMS responder (for instance, a ground crew ren-dezvous with a helicopter-based agency), the latter EMS responder (i.e., the helicopter-based agency) would use this code.

Transferred care to other EMS unit

This code means that the EMS responder providing the data record transferred care to another EMS unit. For example, if one EMS responder transports a patient to a rendez-

vous point with another EMS responder (for instance, a ground crew rendezvous with a helicopter based agency), this code would be used by the transferring unit (i.e., the ground crew).

Transported but patient/parent refused care (AMA)

This code means that patient (or parent of a minor) refused care, whether injured or not. If the EMS responder knows that there is an injury, and the patient refuses care but accepts transport to a receiving facility, this is the correct code for this data element.

Treated and Not transported by EMS Personnel

This code means that the EMS responder provided treatment, and the patient required no further emergency care. This is distinct from the instance in which the patient is known to be in need of further care, but is transported by himself or others to the facility providing further care.

Treated but patient/parent refused transport (AMA)

This code means that patient (or parent of a minor) refused transport, even though the EMS responder provided care. If the patient refuses transport by EMS, but is transported by friends or acquaintances, this is still the correct code for this data element.

Patient/parent refused care and transport (AMA)

This code means that patient (or parent of a minor) refused both care and transport, whether injured or not. If the EMS responder knows that there is an injury, but the patient refuses care and is transported by friends or acquaintances, this is still the correct code for this data element.

No treatment required

This code means that the EMS responder evaluated the patient, and no treatment was required. If the patient refused evaluation, or if the EMS responder did not evaluate a specific patient, this is not the correct code for this data element.

Patient dead upon arrival of EMS responders

This code means that the patient was dead when the first EMS responder arrived at the scene, and no treatment was undertaken.

Discontinued resuscitation at scene

This code means that resuscitation was discontinued at the scene, after treatment was undertaken. This is the correct code for a patient given CPR and then resuscitation was discontinued at the scene; but, not for a patient given CPR at the scene and transported to the hospital while undergoing CPR.

Response cancelled

This code means that the EMS response was cancelled enroute. Cancellation was determined within the responding units department.

No patient found

This code means that no patient could be found by the EMS responder.

EMSA #83   NHTSA #44

Data Element Name:	**Destination**
Data Element Group:	PCR- Transport Data
Definition:	The code for the health care facility, EMS unit, or other destination to which an EMS patient is transferred.
Type & Maximum Size:	Alphanumeric
Code Set:	Home Hospital Medical Office Other Health Facility Other EMS Unit

Content: The hospital and EMS provider agency identifier must be unique and should be the HIPAA National Provider Identifier.

Discussion: This field will be used to link patient care data from different sources (e.g., EMS first responder and transport agencies, and the receiving hospital).

EMSA #84   NHTSA #45

Data Element Name:	**Destination Determination (Rationale)**
Data Element Group:	PCR- Transport Data
Definition:	The primary reason a transport destination was selected.
Type & Maximum Size:	Alphanumeric (4)
Code Set:	Closest Facility (none below) By Request Law Enforcement Choice Managed Care/Insurance Coverage Trauma Patient Destination Policy Burn Patient Destination Policy Pediatric Patient Destination Policy Other Specialty Resource Destination Policy On-line Medical Direction Diversion Other Not Applicable

Content: The code (from those above) that indicates the primary reason the destination was selected.

Discussion: Helps EMS managers determine whether the choice of destination was appropriate. Items which are defined as patient, physician, or family choice are of interest to determine whether a trauma or referral system is functioning well, or is frequently overridden by non-medical issues.

EMSA #85   NHTSA #46

Data Element Name:	**Lights/Sirens from Scene**
Data Element Group:	PCR- Transport Data
Definition:	Identifies the use of lights and/or sirens during transport from the incident scene to the destination.
Type & Maximum Size:	Alphanumeric
Code Set:	No lights and sirens Lights and sirens Upgrade (from Code 2 to Code 3) Downgrade (from Code 3 to Code 2)

Content: The code that identifies the use of lights and/or sirens during transport from the incident scene to the destination.

Discussion: This field provides the data to determine the frequency with which EMS vehicles are using lights and/or sirens during transport from the EMS incident scene to the destination.

EMSA #86

NHTSA #16

Data Element Name:	**Scene Departure Time**
Data Element Group:	PCR- Transport Data
Definition:	Time the EMS response unit began moving away from the incident scene.
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the EMS response unit started moving from the scene to its destination (i.e., 'wheels rolling' to the hospital or transfer point). Midnight is '000000' and begins the day.

Discussion: This time should be obtained from Computer Aided Dispatch (CAD) data, if possible. Although an observed time from PCR Data is acceptable for this field, if any 'upstream times' in the EMS response were determined using GPS universal time, this field also should be determined using GPS universal time.

The field is needed to calculate scene time (i.e., by subtracting the Scene Arrival Time from the Scene Departure Time).

EMSA #87   **NHTSA #17**

Data Element Name:	**Destination Arrival Time**
Data Element Group:	PCR- Transport Data
Definition:	Time the EMS response unit stopped moving at its destination (i.e., at the hospital or transfer point).
Type & Maximum Size:	Time; HHMMSS
Code Set:	HH: 00 – 23; MM: 00 – 59; SS: 00 – 59

Content: The hour, minute, and second that the EMS response unit stopped moving at its destination (i.e., 'wheels stopped rolling' at the hospital or transfer point). Midnight is '000000' and begins the day.

Discussion: This time should be obtained from Computer Aided Dispatch (CAD) data, if possible. However, it is acceptable to use an observed time from PCR Data for this field.

Permits calculation of the time period from scene departure to destination arrival for the response unit.

This field is necessary (with the Time Response Unit was Mobile) to calculate the *Utstein Ambulance Clock.*

The field is needed to calculate the scene departure to hospital arrival time interval (i.e., by subtracting the Scene Departure Time from the Destination Arrival Time).

EMSA #88   NHTSA #87

Data Element Name:	**Destination Cardiac Rhythm**
Data Element Group:	PCR- Transport Data
Definition:	Final monitored cardiac rhythm (i.e., EKG code) as determined by EMS personnel.
Type & Maximum Size:	Alphanumeric
Code Set:	Sinus Rhythm Bradycardia Narrow Complex Tachycardia Wide Complex Tachycardia Ventricular Tachycardia Atrial Fibrillation/Flutter 1st Degree Heart Block 2nd Degree Heart Block 3rd Degree Heart Block Paced rhythm Pulseless Electrical Activity Idioventricular Rhythm Asystole Ventricular Fibrillation Other rhythm #100 (not otherwise listed) Unknown Premature Ventricular Contractions Premature Atrial Contractions

Content: This field contains the code(s) for the patient's final cardiac rhythm that was monitored by EMS personnel.

NOTE: Where PVC and/or PAC are observed in addition to the primary rhythm, the code for the primary rhythm occurs first, and 'PVC' and/or 'PAC' follow(s) the primary code.

Discussion: The initial monitored rhythm is used to assess the survival rate after certain rhythms.

EMSA #89   no NHTSA #

Data Element Name:	**Special Studies #1**
Data Element Group:	PCR – Special Studies Data
Definition:	This unformatted (i.e., free-text) field will be used as needed for special studies.
Type & Maximum Size:	Text
Code Set:	none

Content: Free text used as decided in each LEMSA for variable time periods.

Discussion: This field is used at the discretion of each LEMSA for collecting data, as needed, for special studies.

EMSA #90   no NHTSA #

Data Element Name:	**Special Studies #2**
Data Element Group:	PCR – Special Studies Data
Definition:	This unformatted (i.e., free-text) field will be used as needed for special studies.
Type & Maximum Size:	Text
Code Set:	none

Content: Free text used as decided in each LEMSA for variable time periods.

Discussion: This field is used at the discretion of each LEMSA for collecting data, as needed, for special studies.

EMSA #91   no NHTSA

Data Element Name:	**Special Studies #3**
Data Element Group:	PCR – Special Studies Data
Definition:	This unformatted (i.e., free-text) field will be used as needed for special studies.
Type & Maximum Size:	Text
Code Set:	none

Content: Free text used as decided in each LEMSA for variable time periods.

Discussion: This field is used at the discretion of each LEMSA for collecting data, as needed, for special studies.